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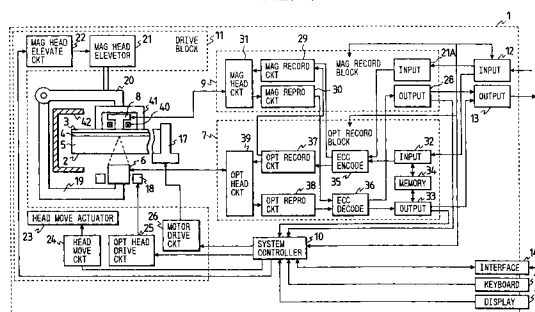
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(54) **Recording and reproducing apparatus.**

(57) A disk-shaped recording medium (2) includes a transparent substrate (5), and an optical recording layer (4) and a magnetic recording layer (3) formed at one side of the transparent substrate. An optical head (6) applies light to the optical recording layer (4) from a light source via the transparent substrate, and focuses the light on the optical recording layer and reproduces information from the optical recording layer. A magnetic head (8), located at a side of the recording medium opposite the side thereof where the optical head is located, records information on the magnetic recording layer (3) or reproduces information from the magnetic recording layer. An optical head moving device (24,25) serves to move the optical head by a movement amount so as to focus the light on an optical track on the optical recording layer which has specified address information. A magnetic head moving device (20) serves to move the magnetic head to a specified magnetic track on the magnetic recording layer by referring to the movement amount of the optical head.

FIG. 1





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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	US-A-4 750 159 (Y. YODA) * abstract; claim 1 * ---	1,2	G11B13/00 G11B11/10 //G11B13/04
X	PATENT ABSTRACTS OF JAPAN vol. 7, no. 224 (P-227) 5 October 1983 & JP-A-58 114 343 (FUJITSU K.K.) 7 July 1983	13	
A	* the whole document * ---	1,2	
X	EP-A-0 414 557 (SHARP KABUSHIKI KAISHA) * column 8, line 23 - column 10, line 11 * * figure 4 * ---	24	
Y	WO-A-85 02933 (NCR CORP.) * abstract * * page 5, line 6 - line 37 * * page 6, line 13 - page 7, line 9 * * claims 1,2; figures 1,2 * ---	1-4,9-13	TECHNICAL FIELDS SEARCHED (Int.Cl.5) G11B
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Y	PATENT ABSTRACTS OF JAPAN vol. 7, no. 18 (P-170) (1163) 25 January 1983 & JP-A-57 172 532 (FUJITSU K.K.) 23 October 1982 * abstract * ---	1,3,18	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 March 1995	Examiner SCHIWY-RAUSCH G.J.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			



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Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
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A	PATENT ABSTRACTS OF JAPAN vol. 12, no. 19 (P-657) (2866) 21 January 1988 & JP-A-62 173 630 (MATSUSHITA ELECTRIC IND. CO. LTD.) 30 July 1987 * abstract * ---	1	
A	EP-A-0 164 131 (VICTOR COMPANY OF JAPAN, LTD.) * abstract * * page 5, line 10 - page 6, line 25 * * page 16, line 20 - page 17, line 7 * * page 24, line 1 - page 25, line 24 * ---	1, 19, 20	
A	PATENT ABSTRACTS OF JAPAN vol. 15, no. 251 (P-1220) 26 June 1991 & JP-A-03 080 450 (NEC CORP.) 5 April 1991 * abstract * ---	15	
A	PATENT ABSTRACTS OF JAPAN vol. 9, no. 190 (P-378) 7 August 1985 & JP-A-60 057 558 (MATSUSHITA DENKI SANGYO K.K.) 3 April 1985 * abstract * -----		
The present search report has been drawn up from the findings			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
Place of search THE HAGUE			Date of completion of the search 22 March 1995
Examiner SCHIWY-RAUSCH G.J.			
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid,
namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions,
namely:

see sheet -B-

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search fees have been paid,
namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims,

namely claims: 1-24



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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-24: Recording and reproducing apparatus for use with a disk-shaped medium with a magnetic and optical recording layer on one substrate side
2. Claim 25 : Magneto-optical recording and reproducing apparatus
3. Claims 26-31: Disk-shaped recording medium with magnetic and optical reading portions
4. Claim 32 : Cartridge for a disk-shaped recording medium with an optical and magnetic recording layer